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Coming Soon! Dive Recovery and Bank Angle Charts for AH-64D Operator's Manual

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The AH-64D Apache Longbow is arguably one of the most demanding cockpit workload-intensive aircraft in the Army's inventory. With a proliferation of new technologies and complex missions, the potential exists to inundate crewmembers with distractions resulting in loss of situational awareness. Crews must maintain situational awareness in their area of orientation, closure rates and proximity to the ground. Failure to understand the aerodynamics and power requirements during maneuvering can have catastrophic results.

Since 2003, the Army has experienced an increasing number of Apache accidents involving controlled flight into terrain. Current missions place aircraft in an operational environment where the margin between power required and power available is minimal when performing aggressive maneuvers. To curtail the number of AH-64 accidents, the Apache Project Management Office wants to address CFIT mishaps by providing dive recovery and energy management charts to assist crews and increase situational awareness.

Currently, we can predict an aircraft's performance for any given environmental condition. The Advanced Attack Helicopter PMO, together with Aviation Engineering Directorate, Directorate of Evaluation and Standardization, U.S. Army Aviation Technical Test Center and Boeing, is developing performance planning charts to be included in the aircraft operator's manuals. Additionally, as these charts are verified and algorithms developed, the PMO is working toward a long-term solution of providing visual or audio cueing to the crews when the aircraft executes a dive or aggressive angle of bank that exceeds the aircraft's capabilities in the current operating environment.